

What is claimed:

1. A suture removal instrument comprising:
 - (a) an elongated body having a proximal handle portion and insulated distal portion;
 - (b) a first conductive member extending from the insulated distal portion of said elongated body, terminating in a tapered tip;
 - (c) a resistive heating element extending alongside said first conductive member and affixed at its distal end to said tapered tip;
 - (d) conduction means for supplying power to said heating element; and
 - (e) activation means for controlling the supply of power to said heating element.
2. The suture removal instrument of claim 1, wherein said elongated body comprises a cylindrical housing.
3. The suture removal instrument of claim 1, wherein said first conductive member comprises an elongated cylinder.
4. The suture removal instrument of claim 1, wherein said tapered tip comprises a conical point.
5. The suture removal instrument of claim 1, wherein said tapered tip comprises a flat scoop.
6. The suture removal instrument of claim 1, wherein said resistive heating element comprises a thin filament.
7. The instrument of claim 1, wherein said resistive heating element is formed from a material selected from the group consisting of nichrome, tungsten, nickel, and stainless steel.
8. The suture removal instrument of claim 1, further comprising a second conductive member extending from the insulated distal portion of said elongated body, wherein said resistive heating element is affixed at its proximal end to said second conductive member.
9. The suture removal instrument of claim 8, wherein said heating element forms an acute angle with the axis of said tapered tip.

10. The suture removal instrument of claim 9, wherein said acute angle ranges from about 5 to about 40 degrees.
11. The suture removal instrument of claim 1, wherein said instrument further comprises a power source contained within the handle portion of said elongated body.
12. The suture removal instrument of claim 11, wherein said power source comprises at least one battery.
13. The suture removal instrument of claim 1, wherein said instrument further comprises a power cord adapted for connection to a wall outlet extending from said elongated body.
14. The suture removal instrument of claim 1, wherein said activation means for controlling the supply of power to said heating element comprises an actuator button.
15. The suture removal instrument of claim 1, further comprising a thermal shield disposed about said first conductive member and mounted to the insulated portion of said elongated body.
16. The suture removal instrument of claim 15, wherein said thermal shield comprises a tubular section and a U-shaped channel portion having closed, tapered distal end, wherein said tubular section is friction fit to said insulated portion and the tapered tip of said first conductive member fits snugly within said U-shaped channel portion.
17. The suture removal instrument of claim 16, wherein said thermal shield is secured to the insulated portion of said elongated body via mating slot and key elements.
18. A method for removing a suture from the skin of a patient, comprising the steps of:
 - (a) applying heat to a loop of the suture so as to heat and cut the suture loop;
and
 - (b) removing the suture from the patient's skin.

19. A method for removing a suture from the skin of a patient, comprising the steps of:

- (a) inserting a thin, resistive heating element under a loop of the suture, between the patient's skin and a knotted portion of the suture;
- (b) activating the resistive heating element so as to heat and cut the suture loop; and
- (c) removing the suture from the patient's skin.

20. A method for removing a suture from the skin of a patient, comprising the steps of:

- (a) inserting the resistive heating element of the suture removal instrument of claim 1 under a loop of the suture, between the patient's skin and a knotted portion of said suture;
- (b) activating the resistive heating element so as to heat and cut the suture loop, and
- (c) removing the suture from the patient's skin.